

**CLAIMS**

1. A process for communication with a redundant system, said system comprising at least one group (10) of redundant physical entities (1, 2), a physical entity (1) of said group being an active entity, the other physical entity or entities (2) of said group being inactive entities, means for managing the redundancy (13) controlling the switching of said physical entities from an active to an inactive state and vice versa, characterized in that:
- each physical entity is allocated a physical identifier;
  - 10 - each group of physical entities is allocated a logical identifier;
  - the management means are communicated with in order to determine the active physical entities;
  - the physical identifier of the active entity is associated with each logical identifier;
  - 15 - the messages of an application are transmitted to the redundant system, substituting each logical identifier with the associated physical identifier;
  - the messages of the redundant system are transmitted to the application, substituting each physical identifier with the associated logical identifier.
- 20 2. The communication process as claimed in claim 1, characterized in that the associations between logical identifier and physical identifier are stored in a correspondence table.
3. The communication process as claimed in any one of the preceding
- 25 claims, characterized in that the physical entities are routers.
4. The communication process as claimed in any one of claims 1 to 3, characterized in that the physical entities are serial lines.
- 30 5. A device for communication with a redundant system, said system comprising at least one group (10) of redundant physical entities (1, 2), a physical entity (1) of said group being an active entity, the other physical entity or entities (2) of said group being inactive entities, means for managing the redundancy (13) controlling the switching of said physical entities from an
- 35 active to an inactive state and vice versa, characterized in that it comprises a

server application (23) and at least one client application (24) communicating together, in which the server application:

- allocates a physical identifier to each physical entity;
- allocates a logical identifier to each group of physical entities;
- 5 - communicates with the management means in order to determine the active physical entities;
- associates the physical identifier of the active entity with each logical identifier;
- transmits the messages of the client application to the redundant system,
- 10 substituting each logical identifier with the associated physical identifier;
- transmits the messages of the redundant system to the client application, substituting each physical identifier with the associated logical identifier.

6. The device for communication as claimed in the preceding claim,  
15 characterized in that the server application (23) communicates with several client applications (24) of one and the same workstation (22).

7. The device for communication as claimed in any one of claims 5 to 6,  
characterized in that the server application operates continuously.

20 8. The device for communication as claimed in any one of claims 5 to 7, characterized in that the physical entities are routers.

9. The device for communication as claimed in any one of claims 5 to 8,  
25 characterized in that the physical entities are serial lines.